

Application Number 10/656,855  
Amendment dated December 27, 2005  
Responsive to Office Action mailed September 27, 2005

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application.

#### **Listing of Claims:**

Claim 1 (Withdrawn): A device comprising a vascular prosthesis including a luminal surface that defines a luminal direction, the luminal surface comprising a plurality of recesses sized to receive at least one cell,  
wherein the recesses are oriented at least partially along the luminal direction.

Claim 2 (Withdrawn): The device of claim 1, wherein the vascular prosthesis comprises expanded polytetrafluoroethylene.

Claim 3 (Withdrawn): The device of claim 1, wherein the luminal surface includes a scale-like texture.

Claim 4 (Withdrawn): The device of claim 1, wherein the luminal surface comprises nodes formed of polytetrafluoroethylene, and wherein the recesses are defined by nodes lifted from the luminal surface.

Claim 5 (Withdrawn): The device of claim 1, wherein the recesses are sized to receive at least one endothelial cell.

Claim 6 (Withdrawn): The device of claim 5, wherein the endothelial cell comprises an endothelial precursor cell.

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Claim 7 (Withdrawn): A device comprising:  
a medical device adapted to be implanted in a human body, the medical device including at least one surface including expanded polytetrafluoroethylene, wherein the surface comprises nodes formed of polytetrafluoroethylene, and wherein the surface includes recesses defined by nodes lifted from the surface.

Claim 8 (Withdrawn): The device of claim 7, wherein the device comprises a vascular prosthesis.

Claim 9 (Withdrawn): The device of claim 7, wherein the recesses are sized to receive at least one cell.

Claim 10 (Withdrawn): The device of claim 7, wherein the recesses are sized to receive at least one endothelial cell.

Claim 11 (Currently Amended): A method comprising rubbing a luminal surface of a vascular prosthesis with a tool to lift nodes from the luminal surface to define a plurality of recesses.

Claim 12 (Original): The method of claim 11, wherein the vascular prosthesis comprises expanded polytetrafluoroethylene.

Claim 13 (Canceled).

Claim 14 (Original): The method of claim 11, wherein the tool comprises a wheel brush comprising bristles.

Claim 15 (Original): The method of claim 14, wherein the brush comprises bristles of at least one of metal and nylon.

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Claim 16 (Currently Amended): The method of claim 14,  
wherein the vascular prosthesis has a generally tube-shaped structure having an axis,  
wherein the luminal surface defines a luminal direction along the axis, and  
wherein rubbing comprises moving the bristles in the luminal direction to cause the bristles to come in contact with the luminal surface.

Claim 17 (Original): The method of claim 11, further comprising mounting the prosthesis on a mandrel.

Claim 18 (Original): The method of claim 11, wherein the luminal surface is an outer surface of the vascular prosthesis when the vascular prosthesis is rubbed with the tool, the method further comprising everting the vascular prosthesis after rubbing.

Claim 19 (Original): A method comprising applying a force to a medical device, the medical device adapted to be implanted in a human body and including at least one surface including expanded polytetrafluoroethylene, to lift nodes from the surface to define a plurality of recesses.

Claim 20 (Original): The method of claim 19, wherein applying the force comprises rubbing the surface with a tool.

Claim 21 (Original): The method of claim 20, further comprising rubbing the surface with the tool in a transverse direction.

Claim 22 (Original): The method of claim 20, wherein the tool comprises a wheel brush comprising bristles.

Claim 23 (Original): The method of claim 19, wherein applying the force comprises applying a pressurized fluid to the surface.

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Claim 24 (Original): The method of claim 23, wherein the fluid comprises one of water and air.

Claim 25 (Currently Amended): A method comprising:  
seeding cells on a surface of a medical device adapted to be implanted in a human body, the ~~medical device including at least one surface~~ including expanded polytetrafluoroethylene,  
wherein the surface comprises nodes formed of polytetrafluoroethylene, and  
wherein the surface includes recesses defined by nodes lifted from the surface.

Claim 26 (Original): The method of claim 25, further comprising harvesting the cells.

Claim 27 (Original): The method of claim 26, wherein the seeding is performed less than fifteen minutes after the harvesting.

Claim 28 (Original): The method of claim 25, wherein the medical device comprises a vascular prosthesis.

Claim 29 (Original): The method of claim 28, wherein the cells comprise endothelial cells.

Claim 30 (Original): The method of claim 29, wherein the endothelial cells comprise endothelial precursor cells.

Claim 31 (New): The method of claim 11, wherein rubbing comprises rubbing the luminal surface in a direction substantially perpendicular to the nodes.

Claim 32 (New): The method of claim 19, wherein the force is applied to the surface in a direction substantially perpendicular to the nodes.